Panasonic
ideas for life

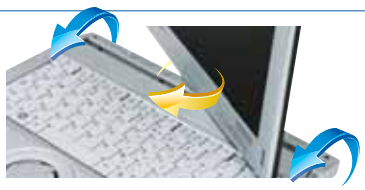
Panasonic recommends Windows® 7.

TOUGHBOOK CF-C1

Tough mobile Convertible Tablet PC with Digitiser and Multi Touch screen

OS	Genuine Windows® 7 Professional 32 Bit
CPU	Intel® Core™ i5-520M vPro™ Processor 2.40 GHz with Turbo Boost up to 2.93 GHz, Intel® Smart Cache 3MB*1
Color TFT-LCD	12.1" WXGA (1280 x 800 dots)
HDD	250 GB*2
RAM	2 GB*1

'Triple Hinge' enhance more ruggedness and smoothness when you rotate the screen.



'Hand-Free Ergonomic Strap' prevents any unintentional drops and reduce stress even using for long time.

Light — Weighing only about 1,490 g (3.28 lbs)*3

76cm — Passed a 76 cm free-fall test*6 and a 100-kgf pressurised vibration test*7

Digitiser + Multi Touch*9 screen

Runs for approx.10 hours*4 by 2 battery pack*5

Spill-resistant keyboard*8

Twin Hot Swappable Battery

*1 1 MB = 1,048,576 bytes/1 GB = 1,073,741,824 bytes. *2 The HDD is 1 GB (1,000,000,000 bytes) in capacity. The actual capacity may be less than displayed, depending on the OS and application software. *3 Average weight in case of single battery pack. The actual weight of each product may vary slightly. *4 Measured by using MobileMark® 2007, 60 nits. The Economy Mode (ECO) was disabled during measurement. When Economy Mode (ECO) is enabled, the operating time becomes approximately 20% shorter than when it is disabled. The period of battery operation time varies according to the operating environment, LCD brightness, and system settings. *5 Only one battery pack is included with the product. For additional batteries, please purchase separately. *6 Carried out in Panasonic technical research lab. Dropped on to bottom (in operation-mode). *7 Carried out in a Panasonic laboratory in non-operation mode. Vibration with pressure of 980 N (100 kgf) is applied uniformly over the top and bottom faces. *8 Spill resistance applies to all of the keyboard. It does not apply to the side panel, battery section, speakers. The Spill-resistant performance of the product does not guarantee that it will be free from damage or malfunction. If water is spilled onto it, be sure to have it repaired. (Note that a fee will be charged for this repair service.) *9 Multi Touch has to be run on Windows 7.
* The shock resistance, pressure resistance, and splash-proof functions are not a guarantee against damage or malfunction.

www.toughbook.panasonic.co.nz

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'Twin Hot Swappable Battery' lets you be able to change the exhausted battery even in ON mode, so you can work with non-stop.

*Only one battery pack is included with the product. For additional batteries, please purchase separately.

Other Features

- User-friendly: Able to input in various styles (landscape, portrait) even standing position.
- Has 5 user-definable buttons from total 6 backlit tablet buttons allowing for greater personalisation.
- 'LCD Rotation Lock' prevents unintentional rotation.
- Support 3 Wireless Connections (WiFi, Bluetooth, WWAN: Option)
- Options: Smart Card Reader, Finger Print Reader, Web Camera, Modem

CF-C1

Model No.		CF-C1A Series
OS*1		Genuine Windows® 7 Professional
CPU		Intel® Core™ i5-520M vPro™ Processor 2.40 GHz with Turbo Boost up to 2.93 GHz, Intel® Smart Cache 3MB*3
Chipset		Mobile Intel® QM57 Express Chipset
Main Memory		2 GB*3 DDR3 SDRAM (4GB*3 MAX)*4
	Number of free slots	1
Video Memory		Windows 7: 763 MB*3 MAX (share with Main Memory)*5 XP: 1024 MB*3 MAX (share with Main Memory)*5
Hard Disk Drive*6		250 GB (Serial ATA) Windows 7: Approx. 300MB is used as a partition with recovery tools. (Users cannot use this partation)
Display Method		12.1" WXGA type (TFT) (1280 x 800 dots)
	Internal LCD	Approx. 16,777,216 colors*7 (1280 x 800 dots)
	External Display*8	Approx. 16,777,216 colors*7 (800 x 600 dots, 1024 x 768 dots, 1280 x 720 dots, 1280 x 768 dots, 1280 x 1024 dots, 1400 x 1050 dots, 1680 x 1050 dots, 1600 x 1200 dots, 1920 x 1080 dots, 1920 x 1200 dots)
	Main+External Simultaneous Display*8	Approx. 16,777,216 colors*7 (800 x 600 dots, 1024 x 768 dots, 1280 x 720 dots, 1280 x 768 dots, 1280 x 800 dots)
Wireless LAN		Intel® Centrino® Advanced-N 6200 (IEEE802.11a/b/g/n compliant)
Bluetooth®		Ver2.1 + EDR / Class2
WWAN		Option (HSPA, 7.2Mbps)
LAN*9		1000BASE-T / 100BASE-TX / 10Base-T
Sound		PCM sound (24bit stereo), Intel® High Definition Audio compliant, Monaural Speaker, Microphone arrays (built-in)
Security Chip		TPM (TCG V1.2 compliant)*10
Card Slots	PC Card Slot	Type II x 1slot (CardBus support, Allowable current 3.3 V: 400 mA, 5 V: 400 mA)
	SD Memory Card Slot*11	1slot (SDHC Memory Card support / copyright protection technology support)
RAM Module Slot		DDR3 204-pin SO-DIMM x 1 slot (1.5 V / PC3-6400 / DDR3 SDRAM)
Interface		USB Ports x 3 (USB2.0 x 3)*12, LAN Connector (RJ-45)*9, External Display Connector (AnalogRGB Mini Dsub 15-pin), Port Replicator Connector (84 pin)*13 Microphone Input Jack (Stereo Mini Jack M3 (Plugin Power support)*14, Headphone Jack (Stereo Mini Jack M3)
Pointing Device/Keyboard		Digitiser + Multi Touch (Capacitive) / Touch Pad / 83 keys
Power Supply		AC adaptor or Battery pack
AC Adaptor		Input: 100 V - 240 V AC, 50 Hz/60 Hz, Output: 16 V DC, 5.0 A
Battery Pack		Li-ion 7.4 V, 6.0 Ah (typ.) /pack
	Operating Time*15	Approx. 5 hours (1 battery pack)
	Charging Time*16	Approx. 2.5 hours (1 battery pack: Power Off) / Approx. 4 hours (1 battery pack: Power on)
Power Consumption		Approx. 30 W*17 / Approx. 80 W*17 (maximum when recharging in the ON state)
Physical Dimensions (W x D x H) (including the carrying handle)		299.2 mm x 226.5 mm x 30.6 mm/ 44.3 mm (front/rear) without protrusion and strap. {11.8" x 8.9" x 1.2"/1.7" (front/rear) without protrusion and strap}
Weight*18		Approx. 1,490 g {Approx. 3.28 lbs} for 1 battery pack
Environment	Temperature	5 °C to 35 °C {41 °F to 95 °F}
	Humidity	30 % to 80 % RH (No condensation)
Options*19		Smart Card Reader, Finger Print Reader, Web Camera, Modem (Data : 56 kbps (V90 MDC) FAX : 14.4 kbps / voice not compatible)
Pre-installed Software*1 (In case of Windows® 7)		Microsoft® Internet Explorer 8.0 / Microsoft® Windows® Media Player 12 / Microsoft® .NET Framework 3.5.1 / Windows Live Mail / Microsoft Silverlight / Adobe Reader / Intel® PROSet/Wireless Software / Icon Enlarger *20 / Loupe Utility / Touch Pad Utility / Dashboard for CF-C1 / Hand Writing Utility / PC Information Viewer / PC Information Popup / Display Rotation Tool / Hotkey Settings / Power Plan Extension Utility / Wireless Switch Utility / Wireless Connection Disable Utility *20 / Bluetooth Stack for Windows by TOSHIBA / Battery Recalibration Utility / Infineon TPM Professional Package *20 / Software Keyboard / DirectX 11*21
		Aptio Setup Utility / Hard Disk Data Erase Utility *22 / PC-Diagnostic Utility *23

*1 Operations of this computer are not guaranteed except for the pre-installed OS and the OS which is installed by using the Product Recovery DVD-ROM provided by Panasonic. *2 This is a model pre-installed with Windows XP Tablet PC Edition and prepared on behalf of customers who purchased a Windows 7 Professional model and wish to exercise their right to downgrade the OS. *3 1 MB = 1,048,576 bytes / 1 GB = 1,073,741,824 bytes. *4 Due to the specification, the actual usable memory on a 32bit operating system will be less (3.4 to 3.5 GB). *5 A segment of the main memory is allotted automatically depending on the computer's operating status. The size of the Video Memory cannot be set by the user. The size of Video memory is allotted depending on the operating system. *6 1 MB = 1,000,000 bytes / 1 GB = 1,000,000,000 bytes. Your operating system or some application software will report as fewer MB/GB. Please use NTFS compatible when use utility of HDD. *7 Approx. 16,777,216 color display is achieved by using the dithering function. *8 Display may be impossible using some connected external displays. *9 Some are unusable depending on connector frame. Transfer speed is MAX in the abstract, it does not mean data transfer speed in actual. It is changeable depending on environment. *10 Need to set-up TPM Professional Package. Refer to the Installation Manual of "TrustedPlatform Module (TPM)". *11 This slot is not compatible with the UHS-I high speed transfer. Operation has been tested and confirmed using Panasonic SD Memory Card with a capacity of up to 2 GB, Panasonic SDHC Memory Card with a capacity of up to 32 GB, and in Windows 7, Panasonic SDXC Memory Card with a capacity of up to 64 GB. Operation on other SD equipment is not guaranteed. *12 Does not guarantee operation of all USB-compatible peripherals. *13 Dedicated Port Replicator has to be used. *14 Please use Micorophone condenser type. *15 Battery life changes depending on environment, LCD brightness and system setup. Battery life is approx. 80% of reactive when ECO mode is active. It is measured by using MobileMark® 2007, 60 nits. *16 Battery charge time changes depending on environment and system set-up. It may take time to charge the completely discharged battery. *17 Computer consumes approx. 0.7W energy when battery is discharged. Even AC adapter isn't connected to PC, the maximum power consumption of AC adapter would be 0.3W if you leave AC cord connected. *18 Average value. Each product weight may be different. *19 For Contactless Smart Card Reader, Express Card Reader, RFID, please consult your salesperson. *20 Need to set up when you want to use. *21 The graphics accelerator of this computer supports up to DirectX 10. *22 This utility is run from product recovery DVD-ROM. *23 This function uses the technology of Ultra-X.

As an ENERGY STAR® Partner, Panasonic Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. Active Matrix color display conforms to industry standards. Some displays may contain isolated illuminated or dark pixels as an artifact of the manufacturing process (effective pixels : minimum 99.998% , defect pixels : maximum 0.002%). Panasonic and TOUGHBOOK are brand names and registered trademarks of Panasonic Corporation. Acrobat® is a registered trademark of Adobe® Systems Incorporated. Intel, the Intel logo, Centrino, Centrino Inside, Intel Core, Core Inside, Intel vPro, and vPro Inside are trademarks of Intel Corporation in the United States and other countries. Mircrosoft® and Windows® are trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies.
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